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(54) Title: MAKING SINTERED, IRON-BASED ALLOY PARTS BY USING BORON-CONTAINING MASTER ALLOYS

(57) Abstract: A method of making high-density (>7.Og/ml) sintered iron-based alloy parts by using boron-containing Master Alloys comprises the steps of mixing an atomised, boron-containing master alloy powder, or a plurality of master alloy powders at least one of which is boron-containing, with a conventional iron or iron alloy powder; optionally adding graphite and a lubricant in conventional amounts as used in powder metallurgy technology; and pressing and sintering the mix to an increased density, preferably in a reducing, inert or vacuum atmosphere at 1050 to 1300°C, to produce the part required. The invention also includes parts produced by the above defined method.

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INTERNATIONAL SEARCH REPORT

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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	DATABASE WPI Section Ch, Week 198640 Derwent Publications Ltd., London, GB; Class M27, AN 1986-260271 XP002386257 -& JP 61 186454 A (MITSUBISHI METAL CORP) 20 August 1986 (1986-08-20) abstract table 1 -----	1-17
X	US 3 999 952 A (KONDO ET AL) 28 December 1976 (1976-12-28) example 5 -----	1,8-10, 12-16
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A	figure 3; examples 2,4 -----	8 -----

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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